BY THE YARD HORTICULTURE NEWSLETTER 2023

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Happy Summer Garden Friends,

Summer has certainly arrived, and I hope everyone has been making the most of this warm and sunny weather. The catch to all this warm weather is that the National Integrated Drought Information System (NIDIS) currently classifies Fayette County as having moderate drought conditions. Keep a watch on your yards and gardens and water accordingly to reduce moisture stress.

I also have some bittersweet news to share with you all. June will be my (Tyson's) last month working in the Fayette County Extension Office. I have accepted a new position in Woodford County as the new Horticulture Agent. While I will no longer be in the office to help after June ends, I'll still be around as I have quite a few Gardeners Toolbox's classes to teach throughout the year. I'm so thankful for the opportunity to work with everyone here in Fayette County and I'm sad to leave so soon.

I'm going to try to shift the mood of this newsletter in a more positive direction by talking about a fun topic like pollinators. Last June we focused heavily on pollinators for national pollinator month. Well this year we're taking it a step further by hosting a whole week of events about pollinators for Lexington's inaugural Pollinator Week which runs from Saturday, June 17th to Sunday, June 25th. To start things off, McConnell Springs Park is hosting a kickoff event on Saturday June 17th from 2pm to 4pm. This event is in celebration of Lexington's first pollinator week. There will be a proclamation by the mayor, pollinator talks and tables from UK's Entomology Department, events for kids and so much more! We've included a flier for this event in the newsletter along with a link to the Pollinator Week website where you can find more information on this event and other events held during Pollinator Week. We hope that enjoy both the kickoff event and some of the other events hosted throughout the week!

Again, I want to thank everyone for all the kindness you have shown me while working here at the Fayette County Extension Office. I hope to see everyone around!

Tyson Gregory, Fayette County Horticulture Technician, tyson.gregory@uky.edu

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Start Monitoring for Garden Pests Today

Whether it's slugs, squash vine borer, or Colorado potato beetle, home gardeners know that every year some creepy crawly is looking for a free meal in their vegetable patch. Unfortunately, pest management in home gardens often relies on a reactive, spray-oriented approach to these pests rather than taking a more engaged attitude that helps to prevent problems. You can change that through integrated pest management and focusing on monitoring for pests before they become a true issue.

Integrated Pest Management

Integrated pest management, also known as IPM, is a philosophy of pest management that intends to use all the available tools at our disposal to help suppress pest populations. This can look different depending on the pest being managed and the situation in which the pest is an issue. In the home garden, some simple pest management tools can include cultural methods such as:

- Fall garden sanitation, which removes overwintering habitat for pests,
- Physical methods, such as floating row covers, which exclude pests from plants, and
- Insecticidal control, such as spraying Bt when dealing with caterpillars.

IPM is not an organic approach necessarily; IPM can include synthetic insecticides when they are the appropriate method of suppression.

Need for Monitoring

IPM can only be successful when monitoring is included as a step in the process. Large scale growers, home pest control operators, and even mosquito abatement coordinators all use monitoring to know where their target pest populations are in their life cycle and population size. Home gardeners, too, need to remember this important tactic. Monitoring for signs and symptoms of insects and other arthropods allows you to know if your management tools, like sanitation, have been successful or can also tell you when to enact physical control strategies, such as floating row covers or when to spray specific insecticides. Monitoring is also the easiest thing to neglect in a pest management plan; it takes time and resources and can seem like a drain (especially when you aren't catching anything).

This spring, you can commit to using monitoring to better understand what pests are trying to infiltrate your garden. The simplest form of monitoring is to just use your eyes to look for known pests in the garden; they tend to be visible, and if they aren't noticeable, then the damage they create will be. Holes chewed into leaves or flowers, cupped and curled leaves, honeydew on leaves, and insect droppings–all of these methods can help with identification of a problem and tell you it's time to act. You can also get a little more technical and start using traps to catch pests even earlier in the process.

Trapping for Garden Pests

First, trapping for garden pests should not be considered a control tactic. The tools listed here likely won't suppress pest populations in your garden. They will tell you what pests are around though, so consider them sentries or security guards for you. This list also isn't comprehensive but should be a good start for those who are interested. Finally, traps only work if they are checked. Putting out any of these traps in May and then remembering it in September means that it wasn't monitoring, but just slowly rotting in the field. Check traps every other day or weekly, as your schedule allows, to look for possible upcoming pest problems.

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Start Monitoring for Garden Pests Today (continued)

<u>Yellow sticky cards</u>: These glue-covered traps will work for monitoring aphids, thrips, whiteflies, mealybugs, mites, and fungus gnats. They work in the home garden as well as near houseplants or in high tunnels. The cards should be placed at plant height and adjusted through the growing season to keep track with the tops of plants. They can be clipped to bamboo poles or other objects to achieve this.

<u>Baited traps:</u> Using shallow containers (such as water dishes, lids to jars, etc. or 2-liter bottles with the top 1/3rd cut and then inverted into the rest of the bottle) you can create a baited trap that pests will be attracted to but will be unable to escape from. Baits can include beer (for slugs), fruit juices (for various pests), or apple cider vinegar (various fly pests), amongst others.

<u>Yellow bowl traps:</u> A yellow plastic bowl filled with soapy water can attract and capture things like squash vine borer, aphids, and many other pests. The bowls act as a super stimulus the insects can't ignore, and the soapy water will kill them as they fly in.

<u>Board or newspaper traps:</u> Placing boards or newspaper on the ground in the garden can create an attractive harborage for squash bugs, slugs, and other garden pests. These can be checked in the morning for pest presence and can also be a good "corral" where you can kill pest groups early in the morning before they warm up and get moving.

<u>Trap plants</u>: These are low cost, easy to grow plants that can be placed near desired plants to act as a monitoring plant. They are attractive to specific pests and will recruit them before the actual crop does. Once on the trap plant, you can either control them there or enact a protective measure for your actual crops. Blue Hubbard squash (squash bugs and squash vine borer), sunflowers (stinkbugs), amaranth (cucumber beetles), and marigolds (mites) are some examples.

With these traps in the garden, you'll be better prepared to catch pests before they cause damage and hopefully end up with more produce on the table this summer!

Source: Jonathan L. Larson, Entomology Extension Specialist, Kentucky Pest News

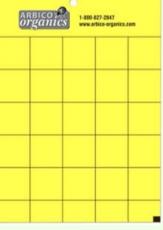


Figure 1: A yellow sticky card can be the size of an index card or double that. They are coated in glue and can snare quite a few different types of pests. (Photo credit: Arbico Organics).



Figure 2: A yellow bowl trap can be used particularly for assessing when squash vine borer adults are flying. Once you capture a moth in the trap, you can treat your plants or place a row cover to prevent the females from laying eggs. (Photo credit: Luciana Musetti, The Ohio State University).

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Soft Landings

The Soft Landings concept was researched and developed by Heather Holm and Leslie Pilgrim, among others including Desiree Narango and Doug Tallamy. The source of this information can be found on their website (https://neighborhoodgreening.org/soft-landings/), along with resources related to the topic.

In the Woods

My two favorite times of year to hike in the woods are fall and spring – fall to see the changing colors, a multitude of mushrooms, and colorful berries; and spring to see the spring ephemerals. When I walk in the woods, most of my time is spent looking at the ground – that may just be the botanist in me, but I am always intrigued to search for what plants I can find growing below the trees on the forest floor. The intermingling patches of flowers, ferns, sedges, and shrubs is always a fun adventure.

In the woods, I'm often on the hunt to find one of my favorite insects – caterpillars! Caterpillars come in so many different shapes and sizes. With over 11,000 species of moths found in North America and at

least 750 butterfly species, there are thousands of different caterpillars to be found! I've seen my fair share – from the io moth caterpillar (look don't touch!) to the spiny oak slug caterpillar, to clymene moth caterpillar (pictured), these critters are marvelous to behold.

But besides their variety of spines, tails, and other adornments, I have a huge appreciation for what caterpillars do! They are an essential piece in the food web – what critter wouldn't want to eat a delicious soft packet of protein and fat?

You may have heard about the importance of providing food for caterpillars, and the right food – caterpillars for the most part eat the plants with which they have coevolved. That means native caterpillars need native plants. Woody plants are the highest producers of caterpillars – with oak trees able to support over 900 species of caterpillars across North America. So if we want to support caterpillars, we should plant native plants.



A Clymene Moth caterpillar. (Photo credit: by Erin Garrett.)

That's it, right?

Let's think about it a little more. Caterpillars enter their pupal life stage, which can last as little as 1-2 weeks or can take months. Where do these pupae complete this life stage? Most of them drop from a tree into the leaf litter below, or the caterpillar drops from the tree and burrows under leaves or underground before becoming a pupa.

Picture those forests I talked about enjoying hiking in – what do you see below the trees? A diversity of different plant species, forming a thriving habitat with cover and protection from predators.

Soft Landings (continued)

What most of us have

Now picture the habitat around one of the trees in your home landscape. Let me guess – it's surrounded by lawn grass? I know most of my trees at home are surrounded by grass. Is a lawn a safe space to be? No! With leaves raked up or mowed, and lawn grass mowed weekly, those caterpillars do not have a safe space to develop.

It's no longer enough just to plant the right plants, we also need to provide something called a soft landing. Soft landing is a safe habitat for these developing pupae to drop to underneath a tree. If we are able to plant native, herbaceous plants that tolerate shade underneath our trees, we will provide a safe space. Letting leaves gather in these landscape beds will mimic the forest floor in the woods, and will add rich organic matter to your garden as well.

The Red Oak Rain Garden Has Soft Landings!

Need some examples? The Red Oak Rain Garden has prime examples of soft landings! Look underneath the red oak – native plants provide a safe space for pupating caterpillars to complete their life cycle.

Shade tolerant plants to think about planting under your trees include our spring ephemerals, like Virginia Bluebells and Dutchman's Breeches; ferns like Christmas Fern and Sensitive Fern; sedges like Pennsylvania Sedge and Rosy Sedge; and shrubs like Winterberry.

Source: Erin Garrett, Energy and Environmental Stewardship Educator, Illinois Extension

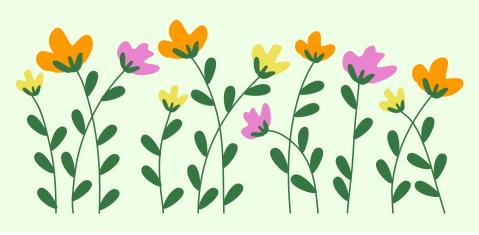


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In our lawns, we usually have grass surrounding our trees. Photo by Erin Garrett.



The Red Oak Rain Garden is a perfect example of a soft landing. Photo credit: Layne Knoche.



Pollinator Protection Starts at Home

You may have read about the declining population of our pollinators. The decline is happening with our honeybees, butterflies and other species. The butterflies and honeybees grab the headlines. Often left out of the news is the decline of what many call the unsung pollination heroes — the native bees, wasps and flies. These are not glamorous and are usually left out of the discussion.

These valuable pollinators include two groups of insects. Social bees, like honeybees and bumblebees, live in colonies. Solitary bees include excellent pollinators such as the green sweat bee, leaf-cutter bee, and the orchard mason bee. This group, as the name implies, lives alone, foraging for pollen and nectar and in the process pollinating many flowers and crops. These various species of bees pollinate more flowers than any other group of insects, yet their demise is seldom mentioned. Why? Because they are small, not highly attractive, and, quite frankly, many people who hear the word 'bee' have negative thoughts.

Native bees such as the mason bee are more efficient at pollination than honeybees. It takes about two hundred and fifty mason bees to pollinate one acre of apple trees. It would take approximately ten thousand to two hundred fifty-thousand honeybees to accomplish the same task. So what can we do to help preserve and increase this crop of pollinators? Here are a couple of easy ideas.

Tips for Increasing Native Bee Populations

<u>Go native</u>- Add more native plants to your garden. Pollinators are native to our region and best adapted to feed on native plants. They have evolved together. They like nectar on our valuable crops but also daisy-like flowers such as gaillardia, asters and sunflowers, to name a few. A diverse garden with many plants is more bee-friendly.

<u>Keep it a little messy</u>- It's not just the plants growing in your garden that help the population. There are simple cultural practices at work, or should I say require less work. Bees like it a little messy. Most of our native bee species nest underground. Avoid using weed fabric and reduce the amount of mulch used in the garden. In fact, leave some area open as this provides the best nesting locations. Remember, a sunny spot is ideal.

Native bees are also attracted to small piles of branches, twigs, and rotting logs. Some species will move into the cracks and crevices and make nesting sites for the next generation. Instead of removing all the dead debris, create small piles throughout the garden that are attractive to many of the solitary bees.

<u>Go Pesticide Free</u>- A bee-friendly garden eliminates or dramatically reduces the use of all pesticides, including insecticides, herbicides and fungicides. While these products are useful in controlling harmful pest problems, they are also detrimental to our pollinator bees. Usually, in a well-planned garden having a diverse planting, pest problems rarely arise, as the natural balance found in nature keeps most issues in check. Even if an outbreak occurs, most healthy and happy plants will recover without intervening.



Leafcutter bees are a common group of solitary bees that can be found in home gardens. Photo credit: Joseph Berger, Bugwood.org

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Pollinator Protection Starts at Home (continued)

Keep in mind, organic pesticide use should also be limited. Just like chemical controls, many of the organic products impact the population of beneficial insects. Most are not formulated to target only the bad guy. In the process of controlling the damaging pest, they also reduce the population of the good guy.

<u>Add a Pollinator Bee Box</u>- We have all heard of birdhouses, but have you thought of installing bee houses? Just like a birdhouse is used for nesting, the same holds for the bee house. Bee houses do not have to be fancy. These man-created nesting boxes borrow from the gardening practice of leaving twigs, branches and decaying wood in the garden that have small holes, perfect for egg-laying.

Bee houses can be made from untreated lumber or a log. Simply drill various size holes ranging from an eighth to a quarter-inch in diameter in the wood. The holes should be at least six inches or more deep for best results. Hang on a fence or post in a sunny location and soon the native bees will come. Other box ideas include paper drinking straws layered in a tin can or even hollow perennial debris tied together and hung from a tree.

Solitary bee activity can be spotted in the nesting box as the holes will become plugged with a mud-grass-like mixture. The bees will lay eggs in the holes, covering and protecting them from invaders with the mixture. Remember, you can also just leave debris in the garden to create habitat.

It is time to show these pollinator workhorses some love. Embrace the solitary bees and welcome them to the garden. It is so easy to put out the welcome mat.



Alfalfa leafcutter bees using a splitting wood nesting block with paper liners. Photo credit: Jason Gibbs, MSU

Source: Dennis Patton, Horticulture Agent, Kansas State Extension



It is a time to raise awareness for pollinators and spread the word about what we can do to protect them. The great thing about Pollinator Week is that you can celebrate and get involved any way you like.

> For a list activities visit: https://www.pollinatorlex.com/



POLLINATOR WEEK Kickoff Event

June 17, 2023 - 2-4pm McConnell Springs Park



- Mayor's Monarch Pledge: Mayor Linda Gorton
- "Saving the Monarch: How You Can Help": Dr. Dan Potter
- Activities for Families and Children: Live insect zoo; insect face painting, coloring, and temporary tattoos; insect displays, including tropical butterflies; live catch and release pollinator hunt; observation beehive, and more.

For other Pollinator Week events, check out: https://www.pollinatorlex.com

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June Quick Tips

- Prune evergreens now through late August.
- Mound soil around potato plants to improve quality.
- Thin fruits on fruit trees when they reach the size of a dime. Leave one fruit for every 6-8" of branch.
- Mow grass at three inches for a healthier lawn. Leave clippings on lawn for a natural source of fertilizer.
- Use chemical controls as a last resort. Patrol plants regularly for insects and hand pick before populations explode. If you must resort to chemicals avoid spraying during the heat of the day and ALWAYS read and follow label directions.
- Remove flower buds from culinary herbs to keep them growing and productive.
- Keep mower blades sharpened. Clean cuts make for less disease problems and easier mowing for you.
- Mulch plants for the summer. It will conserve moisture in hot weather and prevent weeds from growing.
- Keep gardens and beds well weeded. Weeds compete for light and nutrients, reducing yields. By preventing weeds from setting seed you will lessen weed problems in future years.
- Pinch chrysanthemums back every few weeks until mid-July. This will promote fuller bushier plants that are less likely to fall over when in bloom.
- Start planning your fall vegetable plantings now. Many cool season crops like lettuce, peas, and cole crops will be finished from the spring planting and can be planted again in late July and August for a fall crop
- Register and pay online for 2023 Gardeners Toolbox classes by visiting: https://fayette.ca.uky.edu/classregistration

Recipe of the Month



Blackberry and Basil Spritzer

2 cups lemon sparkling water2 cups ice cubes (6-7 large cubes)2 cups blackberries

Put all ingredients, except basil, in

a blender and blend on high speed

until completely combined. Strain

mixture through sieve to separate

add 1 basil leaf to each drink and

serve with lime wedge.

blackberry seeds. Pour in 3 glasses,

2 tablespoons honey 1⁄2 lime, juiced 3 basil leaves

Plate it up

Serves: 3, 16 oz. servings

Nutritional Analysis: 90 calories, 0 g fat, 0 g saturated fat, 0 mg cholesterol, 30 mg sodium, 22 g carbohydrate, 5 g fiber, 15 g sugar, 1 g protein

